OCR Teaching in the Lifelong Learning Sector – Qualification Units

Unit 35 – Level 4 Planning and Enabling Learning (Numeracy)

Level 4
QCA Accreditation Number J/500/9964

Unit description

Unit aims

The aim of this unit is to develop understanding and skills in planning and enabling numeracy learning.

Credit value   9

Unit synopsis

This unit is about:

- Understanding the role and methods of initial assessment in the learning and teaching process
- Evaluation of ways of planning, negotiating and recording appropriate learning goals with learners
- Evaluation of the strengths and limitations of a range of resources, including new and emerging technologies, showing how these resources can be used to promote equality, support diversity and contribute to effective learning
- Planning of a scheme of work and related lesson plans using a variety of delivery methods which meet individual learners' needs and curriculum requirements
- Demonstrate effective communication skills in relation to meeting the needs of learners
- Understand and demonstrate knowledge of the minimum core specifications in own practice
- Reflection on own strengths and weaknesses in relation to knowledge and use of assessment methods.

Examples of teaching and learning strategies

The following teaching methods and learning strategies are appropriate to the delivery and development of the knowledge, understanding and skills covered in this unit. A variety of these should be used to provide a model of good practice to the candidate. This list is not exhaustive:

- Small group discussion
- Directed study and research
- Lecture
- Resource based learning
- Question and answer
- Micro teaching session
- Role play
- Discussion
- Lecture and exposition
- Games
- Workshop activities
- Tutorials

Guidance on delivery for centres

For many candidates this may be the first opportunity to explore in depth the skills in planning and enabling numeracy learning.

Appropriate methods of delivery:

- Provision of individual learning plans
- Provision of guidance on the qualification and progression routes to further development
- Provision of opportunities for learning e.g. discussion, tutorials, workshop activities etc
- Provision of ongoing mentoring to the candidate, including review and feedback on learning experiences and development of competence
- Observation of peer-to-peer discussions of groups of candidates or of discussions with colleagues
- Observation of candidates working within a partnership
- Professional discussion with the assessor will test the knowledge requirements, where these are not already met through the activities described above.

Guidance on assessment for centres

The assessment can include:

- Written assignment
- Case studies
- Research projects
- Student assessments
- Individual learning plans
- Lesson plans

- Written review of students progress.

This is a level 4 unit and thus the candidate must demonstrate complex skills and knowledge in this particular area of numeracy acquisition and use. The ability to recognise and develop thinking across these criteria is to be encouraged but it does mean that written evidence, whilst aiming for succinctness and clarity of thought, will need to be of sufficient depth and breadth to meet the level 4 standard. There is an expectation that the written work will be presented at the appropriate level.

Suggested reading

The following list is not intended to be exhaustive, but provides suggested texts which candidates may find helpful. It is not compulsory for students to read all publications in the list; they are identified for reference only.

Brittan, J. (1996) *An Introduction to Numeracy Teaching* London: BSA.

Bynner, J. and Parsons, S. (1997) *Does Numeracy Matter?* London: Basic Skills Agency

Bynner, J. and Parsons, S. (1998) *Influences on Adult Basic Skills.* London: Basic Skills Agency

Bynner, J. and Parsons, S. (1998) *It Doesn't Get Any Better.* London: Basic Skills Agency

Chinn, S. (2004) *The trouble with Maths* London: Routledge Falmer

Coben, D. et al (2003) *Adult Numeracy: review of research and related literature.* London: NRDC

Flegg, G. (1984) *Numbers, their History and Meaning* London: Andre Deutsch.

Maths4Life (2006) *Thinking Through Mathematics – Strategies for Teaching and Learning* DfES

Henderson, A. (1998) *Maths for the Dyslexic, A Practical Guide.* London: Fulton.

Herrington, M. and Kendall, A. (eds) (2005) *Insights from Research and Practice: A Handbook for Adult Literacy, Numeracy and ESOL Practitioners.* Leicester: NIACE.

Moser, C. (1999) *Improving Literacy and Numeracy. A Fresh Start.* London: DfEE ref:CMBS 1

Northledge, A. (2005) *The Good Study Guide* Milton Keynes: Open University.

Reece, I. and Walker, S. (2006) *Teaching Training and Learning* (6th ed) Sunderland: Business Education

Swan, M. (2006) *Collaborative Learning in Mathematics, A Shallenge to our Beliefs and Practices* Leicester: NIACE.

Tummons, J. (2007) *Becoming a Professional Tutor in the Lifelong Learning Sector* Exeter: Learning Matters.

Wallace, S. (2007) *Teaching, Tutoring and Training in the Lifelong Learning Sector* (3rd ed) *(Achieving QTLS)* Exeter: Learning Matters.

Journals

Adults Learning

Numeracy Briefing

Reflect The Magazine of the NRDC.

Websites

www.ncetm.org.uk/ The National Centre for Excellence in Teaching of Mathematics (NCETM)

www.lifelonglearninguk.org Lifelong Learning UK: Professional Standards for teachers of Mathematics (Numeracy)

http://www.maths4life.org.org Resource: 'Thinking Through Mathematics, strategies for teaching and learning' DfES 2007

 www.dfes.gov.uk/readwriteplus Adult Numeracy Core Curriculum and related documents.

Assessment Criteria, Knowledge and Evidence Linked to Practice

1.

		Assessment Criteria	Knowledge	Evidence Linked to Practice
1.1		Analyse the role of initial assessment in the learning and teaching process.	The different types of skills, knowledge and understanding that can be assessed in numeracy.	Written evidence including: • a discussion of the role of initial assessment
1.2		Describe and evaluate different methods of initial assessment for use with learners.	The strengths and limitations of a range of assessment tools used in initial numeracy assessment including computer based software.	• an evaluation of a range of different initial assessment methods
1.3		Evaluate ways of planning, negotiating and recording appropriate learning goals with learners.	The advantages and disadvantages of a range of approaches used in identifying, planning and recording numeracy learning goals.	• an evaluation of different ways of negotiating and recording appropriate goals with learners.

2.

		Assessment Criteria	Knowledge	Evidence Linked to Practice
2.1		Establish and maintain an inclusive learning environment.	The concept, creation and maintenance of an inclusive learning environment within numeracy skills development	Production of a numeracy teaching portfolio which includes: • a profile of learners' initial assessments
2.2		Devise and justify a scheme of work which meets learners' needs and curriculum requirements.	The principles and application of a scheme of work in the development of a numeracy curriculum designed to meet learners' needs	• diagnostic assessments • individual learning plans • schemes of work and corresponding session
2.3		Devise and justify session plans which meet the aims and needs of individual learners and/or groups.	The relationship between a scheme of work and session plans in meeting numeracy development needs effectively	plans identifying level of learners
2.4		Analyse ways in which session plans can be adapted to the individual needs of learners.	Recording of progress for group, individual and differentiated.	• evaluations from the learner and tutor.
2.5		Plan the appropriate use of a variety		

		Assessment Criteria	Knowledge	Evidence Linked to Practice
	2.6	of delivery methods, justifying the choice. Identify and evaluate opportunities for learners to provide feedback to inform practice.	Numeracy skills targets, activities and assessment. Strengths and limitations of a range of delivery methods appropriate for developing numeracy skills at the relevant level. Learner evaluation opportunities and feedback tools e.g. session exit cards.	

3.

		Assessment Criteria	Knowledge	Evidence Linked to Practice
	3.1	Select/adapt, use and justify a range of inclusive learning activities to enthuse and motivate learners, ensuring that curriculum requirements are met.	The benefits and limitations in developing numeracy using a range of individual, pair/small group and whole group activities and learning styles from a) the teaching and b)the learning perspective.	Review of learning styles used to motivate learners and ensure numeracy curriculum requirements are met.
	3.2	Analyse the strengths and limitations of a range of resources, including new and emerging technologies, showing how these resources can be used to promote equality, support diversity and contribute to effective learning.	The theory and practice in selecting and evaluating numeracy development resources according to effectiveness in: • developing understanding • promoting application • enhancing achievement • promoting equality and supporting diversity among learners	Identification of resources used to promote learning. Identify examples of literacy, language, numeracy and ICT skills used and how they support learner achievement.
	3.3	Identify literacy, language, numeracy and ICT skills which are integral to own specialist area, reviewing how they support learner achievement.	Skills required for effective delivery including: • literacy • language • numeracy • ICT.	Two observed lessons evaluating use of resources and appropriateness for inclusive learning and teaching.
	3.4	Select/adapt, use and justify a range of inclusive resources to promote inclusive learning and teaching.		

		Issues of ethnicity, culture, age, gender, educational background, socio-economic status and social networks which could impact upon learning. Physical and mental disabilities which could impact upon learning.	

4.

	Assessment Criteria	Knowledge	Evidence Linked to Practice
4.1	Use and evaluate different communication methods and skills to meet the needs of learners and the organisation.	Strengths and limitations of communicating by email, minutes, report, presentation, informal and formal discussion, telephone in workshops, tutorials, individual/pair/small group and whole group work, meetings, synchronous and asynchronous networked learning using skills in argument, negotiation, arbitration, explanation, questioning, summing up and persuasion.	Two observed lessons evaluating use of different communication methods used.
4.2	Evaluate own communication skills, identifying ways in which these could be improved including an analysis of how barriers to effective communication might be overcome.		Self assessment of communication skills and a personal ILP.
4.3	Identify and liaise with appropriate and relevant parties to effectively meet the needs of learners.	Evaluating communication skills and development areas. Communication skills development action plans. Skills needed to discuss curriculum planning, assessment and development with key learning stakeholders.	Evidence of involvement in meetings with colleagues e.g. co-ordinators, lecturers where relevant curriculum development and accreditation issues were discussed.

5.

	Assessment Criteria	Knowledge	Evidence Linked to Practice
5.1	Apply minimum core specifications in literacy to improve own practice.	Requirements of the minimum core specifications in relation to own personal skills of literacy, numeracy and ICT.	Written evidence of self assessment of the competences as specified in the functional skills. (literacy, numeracy and ICT). A personal ILP to improve own practice in the minimum core specifications where necessary.
5.2	Apply minimum core specifications in language to improve own practice.		
5.3	Apply minimum core specifications in mathematics to improve own practice.		
5.4	Apply minimum core specifications in ICT user skills to improve own practice.		

6.

	Assessment Criteria	Knowledge	Evidence Linked to Practice
6.1	Use regular reflection and feedback from others, including learners, to evaluate and improve own practice, making recommendation for modification as appropriate.	Methods in recording reflection from a range of learning stakeholders to inform practice.	Reflective diary, including evaluation and modification of own practice, reviewed by course tutors/peers on a regular basis.